

REMARKS

The claims previously in the case have been replaced by a set of new claims that are believed to be proper as to form and clearly patentable over the cited references.

Reconsideration is accordingly respectfully requested, for the rejection of the claims as anticipated by or unpatentable over SU 1470730.

In the first place, it is believed that the indication of allowability of claim 13 was intended for claim 14. On this assumption, note that new claims 28 and 29 correspond to claims 14 and 16, respectively.

Notice that new claims 19-25 correspond somewhat to previous claims 10-16; but in new claim 19, MgO is less than 2.0%. New claims 26 and 27, that specify that Na₂O can be less than 0.45% and 0.39%, are based on Examples 18 and 22.

It is not believed that SU 1470730 can thus be applied against any of the new claims. This reference discloses a fused refractory material used as a lining for glass making furnaces. Preferably, this material has a reduced bubble forming index when it is in contact with molten glass.

But in the present invention, the material is not submitted to the same chemical and physical constraints as a checkerwork element of a glass furnace regenerator. In particular, it is not in contact with condensates of alkaline

substances. It does not have to withstand the same thermal variations either.

Thus, according to the invention, the content of sodium oxide should be less than 0.6%, whereas, according to SU 1470730, this content should be more than 0.5%. As explained in our application, the upper limit of 0.6% is necessary to obtain a sufficient alkaline corrosion resistance, which is also a problem specific to regenerators.

In some embodiments, it is particularly advantageous that the Na_2O content be less than 0.45% (Example 22, good yield) or less than 0.39% (Example 18, test A). See new claims 26 and 27.

These differences explain why, in SU 1470730, the content of magnesia should be more than 2%, whereas according to claim 19, this content is less than 2%. As explained in the present description, above 2% of magnesia, the products of the invention are much less resistant to the thermal cycling specific to regenerators.

Finally, these differences may also explain why the product described in SU 1470730 necessarily contains more than 0.5% zirconia whereas, according to the invention, the zirconia content should be as low as possible, preferably less than 0.1%, and more preferably zero. Specifically, our description indicates that a zirconia content as low as possible improves the

performance in thermal cycling and industrial feasibility (see new claim 29).

As these distinctions are clearly brought out in the new claims, it is believed that they are all patentable, and reconsideration and allowance are respectfully requested.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

YOUNG & THOMPSON

A handwritten signature in black ink, consisting of a series of connected loops and peaks, resembling a stylized 'R' followed by several 'm' or 'n' shapes.

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